## What is claimed is:

- 1. A polynucleotide shown by the nucleotide sequence set forth in SEQ ID NO: 1 in the sequence listing or by the complementary nucleotide sequence, or a polynucleotide encoding a protein shown by the amino acid sequence set forth in SEQ ID NO: 2 in the sequence listing, or a polynucleotide shown by the complementary nucleotide sequence of the polynucleotide.
- 2. A polynucleotide shown by the nucleotide sequence set forth in SEQ ID NO: 3 or SEQ ID NO: 5, in the sequence listing, or by the complementary nucleotide sequence, or a polynucleotide encoding a protein shown by the amino acid sequence set forth in SEQ ID NO: 4 or SEQ ID NO: 6 in the sequence listing, or a polynucleotide shown by the complementary nucleotide sequence of the polynucleotide.
- 3. A polynucleotide containing a polynucleotide shown by the nucleotide sequence set forth in SEQ ID NO: 3, in the sequence listing or by the complementary nucleotide sequence, or a polynucleotide containing a polynucleotide encoding a protein shown by the amino acid sequence set forth in SEQ ID NO: 4, in the sequence listing, or a polynucleotide shown by the complementary nucleotide sequence of the polynucleotide, wherein the polynucleotide encodes a protein that accelerates the activation of Cdc42.
- 4. A polynucleotide shown by a nucleotide sequence having a homology of at least approximately 70% with the nucleotide sequence of the polynucleotide according to claim 1, or claim 2, wherein the polynucleotide encodes a protein that accelerates the activation of Cdc42.
- 5. A polynucleotide with a mutation or an induced mutation, such as deletion, substitution, or addition of one or more nucleotides in the nucleotide sequence of the polynucleotide according to claim 1 or claim 2, wherein the polynucleotide encodes a protein that accelerates the activation of Cdc42.
- 6. A polynucleotide that hybridizes to the polynucleotide according to claim 1 or claim 2 under stringent conditions, wherein the polynucleotide encodes a protein that accelerates the activation of Cdc42.
- 7. A recombinant vector containing the polynucleotide according to any one of claims 1 to 6.

- 8. A transformant that has been transfected with the recombinant vector according to claim 7.
- 9. A transformant that has been transfected with the recombinant vector according to claim 7, and a recombinant vector containing a polynucleotide encoding Cdc42.
- 10. A protein shown by the amino acid sequence set forth in SEQ ID NO: 2, in the sequence listing.
- 11. A protein shown by the amino acid sequence set forth in SEQ ID NO: 4 or SEQ ID NO: 6, in the sequence listing.
- 12. A protein encoded by the polynucleotide according to any one of claims 3 to 6.
- 13. A method of producing the protein according to any one of claims 10 to 12, comprising a step of culturing the transformant according to claim 8 or claim 9.
- 14. An antibody that recognizes the protein according to any one of claims 10 to 12.
- 15. A method of identifying a compound that inhibits the function of the proteins according to any one of claims 10 to 12, and/or the expression of the polynucleotides according to any one of claims 1 to 6, comprising detecting the presence, absence or change in the function and/or the expression under conditions where the interaction of a compound with the protein and/or the polynucleotide are allowed, and determining whether the compound inhibits the function of the protein and/or the expression of the polynucleotide.
- 16. The method according to claim 15, wherein the function of the protein is a function of binding to Cdc42 and/or a function of accelerating the activation of Cdc42.
- 17. A method of identifying a compound that inhibits the function of the protein according to any one of claims 10 to 12 and/or the expression of the polynucleotide according to any one of claims 1 to 6, comprising using at least one selected from the proteins according to any one of claims 10 to 12, the polynucleotides according to any one of claims 1 to 6, the recombinant vector according to claim 7, the transformants according to claim 8 or claim9, and the antibody according to claim 14.
- 18. The method according to claim 17, wherein the function of the proteins is a function of binding to Cdc42 and/or a function of accelerating the activation of Cdc42.
- 19. A method of determining whether a tissue specimen derived from a human stomach tissue is a

tissue derived from a human stomach tumor or not, comprising measuring an amount of expression of the polynucleotide according to any one of claims 1 to 6 in the tissue specimen.

- 20. The method according to claim 19, wherein the method determines that the tissue specimen is a tissue derived from a human stomach tumor in the case when the amount of expression of the polynucleotide according to any one of claims 1 to 6 in the tissue specimen is 4.5 times higher than that in a control tissue derived from normal human stomach tissue.
- 21. An agent for preventing and/or treating a stomach tumor, comprising a compound that inhibits the function of the protein according to any one of claims 10 to 12 and/or a compound that inhibits the expression of the polynucleotide according to any one of claims 1 to 6, as an effective ingredient.
- 22. A method of preventing and/or treating a stomach tumor, comprising using a compound that inhibits the function of the protein according to any one of claims 10 to 12 and/or a compound that inhibits the expression of the polynucleotide according to any one of claims 1 to 6.
- 23. A reagent kit containing at least one selected from the protein according to any one of claims 10 to 12, the polynucleotide according to any one of claims 1 to 6, the recombinant vector according to claim 7, the transformant according to claim 8 or claim 9, and the antibody according to claim 14.